

HydroXC XML Schema Workshop Series Report

Day 1 Monday July 18th, 2004, 12:00-2:00pm

Day 2 Wednesday July 19th, 2004, 12:00-2:00pm

Day 3 Thursday July 21^h, 2004, 2:00-4:00pm

Day 4 Wednesday July 26th, 2004, 12:00-2:00pm

Apex Digital Systems Offices Silver Spring, MD And Web Conference

<u>Participants</u>

Day 1

- Jon Roe, NOAA Office of Hydrologic Development
- Lee Cajina, NOAA Office of Hydrologic Development
- Michael Piasecki*, Drexel University
- Phil Pasteris*, Natural Resources Conservation Service
- Tom Pagano*, NRCS
- Manuel Mattke, Apex Digital Systems
- Alia Williams, Apex Digital Systems
- Andrey Ignatov, Apex Digital Systems

Day 2

- Jon Roe, NOAA Office of Hydrologic Development
- Dane Ohe*, United States Geological Survey
- David Coyle*, United States Geological Survey
- Ken Pavelle*, NOAA ABRFC
- Manuel Mattke, Apex Digital Systems
- · Andrey Ignatov, Apex Digital Systems

Day 3

- Lee Cajina, NOAA Office of Hydrologic Development
- Andy Carter*, Wier & Associates
- Trevor Barkhouse*, Usability Sciences Corporation
- Andrey Ignatov, Apex Digital Systems

Day 4

- Jon Roe, NOAA Office of Hydrologic Development
- Mike Perryman*, US Army Corps of Engineers

- Cameron Ackerman *, US Army Corps of Engineers
- · Alia Williams, Apex Digital Systems
- Andrey Ignatov, Apex Digital Systems

Workshop Summary

- Introductions/Roll call
- Overview of meeting agenda
- Overview of the HydroXC XML Schema project
- Presentation and discussion of the Hydrologic XML Schema
- Discussion of the XML development in collaborating organizations and work with example XML documents
- Questions and answers
- Planning of next steps/Wrap up

Overall Summary

The HydroXC XML Schema Workshop series was hosted at the office of Apex Digital Systems in Silver Spring, MD with consortium members joining via web conference. Due to the number of attendees and the scope of data samples for review, the workshop was arranged as a series of four independent sessions.

During the workshops the draft XML schema was presented to the members of the consortium. The presentation was accompanied with discussion of the overall concepts of the schema. After the schema was review on a high level, discussion turned to the implementation of the data examples, which were provided by the consortium members, into XML documents.

The feedback received during and after the workshop sessions was, overall, very positive. There was support expressed from the consortium members for the draft schema presented during the sessions.

Each independent workshop group reviewed and discussed practical XML documents that used the example data. This allowed for in-depth discussion that was highly relevant to the workshop participants. These discussions helped uncover several important about the schema structure as well as its practical implementation in the XML examples. These discoveries will be taken into consideration during the next phase of the schema development.

Participants of the workshops mentioned the valuable progress made in the HydroXC XML schema development. Continuation of the development of the schema was encouraged, as well as that continuation of the close collaboration established by these workshops. The coming schema development activities will continue to involve consortium members in both theoretical and practical spheres as we move into the next phase of the project.

^{*}Via Web Conference

Workshop Findings

The following are key comments, concerns and suggestions that were raised during the various workshop sessions. As the consortium moves into the second phase of development, these findings will be reviewed and considered for future iterations of the schema.

- There was a recommendation to change the naming conventions used in the Header component of the schema. The suggestion was to investigate existing standards and, at the agreement of the consortium, to adopt those standards where they apply.
- It was suggested that the metadata should be separated from the data parts to create distinct components or perhaps different files. This may be useful for test transaction purposes and for minimizing metadata presence in the data exchanges. Another reason for the separation would be to allow for easier searching if only the metadata files were queried. One thought was, in keeping with the flexible nature of the schema project, to allow for the file to be created in one or two sections depending on the purposes of the author(s).
- During a review of the data examples there was a desire expressed to make the XML documents even more descriptive with a move towards greater readability. The XML documents should be easily parsed for use with different software components while remaining readable and meaningful for hydrology specialists and for non specialist subscribers.
- There was some concern expressed about the ability of the schema to model data from a multidimensional table.
- There was general agreement that a common dictionary of terms and/or requests would benefit the consortium. Other items brought up as possibilities for the library were converters for the schema to and from SHEF.
- There was discussion around the balance between a flexible, more generic schema and a more operationally focused schema. There was also a question expressed about the future of the schema as to whether it will be used only for data transfers or for transfers as well as storage. These concepts should be discussed in further detail and their scope decided for the HydroXC schema.

Workshop Results and Next Steps

All four sessions of the Workshop received positive- response from the participants. The concept of the draft XML schema itself and the examples of its usage gained collaborator's interest and attention. The discussions held during the sessions were open and beneficial.

- Copies of the presented materials and example XML document where requested by participants for further evaluation. Revised and edited documents will be presented on the HydroXC website in reference to the Workshop series.
- There is the intent that some of the participants adopt ideas and findings based on the draft schema into their current work with XML design and development. This would be the first step towards the adoption of the HydroXC XML Schema as a practical solution, not only a theoretical investigation.
- Representatives from several organizations agreed to increase their collaboration efforts for the continuing Schema development. Methods of collaborative work and ways of cooperation will be defined during the next phase of the project.